Bruhat Bengaluru Mahanagara Palike

BYTARAYANAPURA DIVISION

TOTAL ABSTRACT BAR CHART

Name Of work : - PACKAGE 2 IMPROVEMENTS TO ROADS AND DRAINS CONSTRUCTION OF RO WATER PLANT BANGALURU ONE CENTER IN WARD NO. 7 AND 8 BYATARAYANAPURA DIVISION AS PER ANNEXURE GP NO UDD 217 SFC 2016 DATED 28.05.2016 WORKS SL.NO. FOR WARD NO.7, 12 TO 23 WARD NO. 8 24 TO 32.

Job Code :- 007-16-000043 26618

Name of Agency :-Benaka Developers and Projects Pvt. Ltd

BOQ Item No	Description	Unit	% Completed	20%	40%	60%	80%	100%
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)	Cum	72.82					
2	Removing & Refixing Stone slabs of drains and Pointing in C.M(1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)	Sqm	84.79					
3	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 10cms thick (P.No.25, I.No.5.31.2 of PW, P&IWTD SR 2016-17)	Sqm	86.44					
4	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)	Sqm	85.95					
5	KSRRBM200-13.1.Dismantling of existing structures like culverts,Bridges,retaining walls and other structure comprising of masonry,cement concrete,wood work,steel work,including T&P and scaffolding where ever necessary,sorting the dismantled material,disposal of unserviceble material and stacking the serviceble material with all lifts complete as per specifications. II.Bymechanicalmeans,A.CementconcreteGradeM-15&M-20(P.No.137,I.No.18.20ofPW,P&IWTD SR 2016-17)	Cum	20.00					
6	KSRRBM200-15.2..Dismantling of existing structures like culverts,Bridges,retaining walls and other structure comprising of masonry,cement concrete,wood work,steel work,including T&P and scaffolding where ever necessary,sorting the dismantled material,disposal of unserviceble material and stacking the serviceble material with all lifts Dismantling of stone masonry, rubble stone masonry in cement mortar with all lead and lifts, loading and unloading and all incidental charges etc,.. complete as per specifications. and direction of engineer incharge of the work	Cum	0.00					
7	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)	Cum	95.5					
8	KSRB 5-14: providing and constructing load bearing wall with solid concrete blocks having block density not less than 1800 kg/m3 of size solid block 400x150x200mm having a minimum average compressive strength of 4.00 N/mm2 confirming to IS 2185(Part 1):2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. KBS No. 5.4 (P.No.24, I.No.5.26.2 of PW, P&IWTD SR 2016-17)	Sqm	80.00					
9	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13. (using available stones) loading and unloading and all incidental charges etc,.. complete as per specifications. and direction of engineer incharge of the work	cum	0.00					
10	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13. (P.No.23, I.No.5.6 of PW, P&IWTD S.R 2015-16)	cum	59.00					

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BOQ Item No	Description	Unit	% Completed	20%	40%	60%	80%	100%
11	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.112, I.No.15.1 of PW, P&IWTD S.R 2015-16	Sqm	100.00					
12	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTD S.R 2015-16)	Cum	73.00					
13	Providing and fixing RCC Precast cover slab of 100mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)	Sqm	61.00					
14	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)	Sqm	34.00					
15	KSRRB M300-52.2. Scarifying Existing Bituminous surface to a depth of 50mm by Mechanical Means. Scarifying the existing bituminous road surface to a depth of 50mm and disposal of scarified material and complete as per specifications. MORTH Specification No. 305.4.3 (P.No.148, I.No.19.59 of PW,P&IWTD S.R 2016-17	Sqm	67.00					
16	KSRRB M300- Scarifying Existing Granular Surface to a Depth of 50mm by Manual Means. KSRRB M300-52.1. Scarifying the existing granular road surface to a depth of 50mm and disposal of scarified material and complete as per specifications. MORTH Specification No. 305.4.3 (P.No.148, I.No.19.58 of PW,P&IWTD S.R 2016-17)	Sqm	48.70					
17	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location and complete as per specifications. MORTH Specification No.301 (P.No.148, I.No.19.14 of PW,P&IWTD S.R 2016-17)	Cum	91.00					
18	KSRRB M300-Construction of Subgrade and Earthen Shoulders. KSRRB M300-55. Construction of sub-grade and earthen shoulders with approved material Gravel/Murrum with all lifts & leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table No. 300-2 complete as per specifications (including cost of earth, watering charges & compaction by vibratory rollercompaction by vibratory roller to 97% of proctors density) MORTH Specification No. 305	Cum	0.00					
19	KSRRB M400-6.2: Construction of granular sub-base by providing Close graded material,mixing in a mechanical mix plant at OMC,carriage of mixed material to worksite,spreading in uniformlayers with mortar grader on prepared surface and compacting with vibratory roller to achieve the desired density,complete as per specifications.A Plant Mix method For Grading II Material (P.No.155, I.No.20.4.2 of PW,P&IWTD SR 2016-17)	Cum	60.00					
20	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWTD SR 2016-17)	Sqm	90.00					
21	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWTD SR 2016-17)	Sqm	90.00					
22	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWTD SR 2016-17	Sqm	78.00					

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BOQ Item No	Description	Unit	% Completed	20%	40%	60%	80%	100%
23	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17)	Sqm	83.00					
24	KSRRB M500-16. Providing and laying dense bituminous macadam 50-75mm compacted thickness with 4.5% VG-30 Bitumen using 40/60 TPH capacity H.M.P, using crushed aggregates of grading II, premixed with VG 30 grade bituminous binder and transporting the hot mix to work site, laying with mechanical paver to the required grade level and alignment rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10, complete in all respects complete as per specification MORTH specification No. 507 (P.No.162 I.No. 21.17.6 of PW,P&IWTD S.R 2016-17)	Cum	97.00					
25	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)	Cum	82.00					
26	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @	Cum	91.00					
27	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.(P.No.177, I.No.22.7 of PW, P&IWTD SR 2016-17)	Sqm	86.00					
28	Providing and fixing Pre cast solid concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete (P.No.25, I.No.5.30 of PW,P&IWTD S.R 2016-17	No's	77.00					
29	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (P.No.182, I.No. 24.1 of PW,P&IWTD SR 2016-17)	Sqm	77.00					
30	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17)	Sqm	55.00					
31	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Handpump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its quality f 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., as per Specification and direction of the engineer-in-charge of	each	67.00					

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BOQ Item No	Description	Unit	% Completed	20%	40%	60%	80%	100%
32	Sinking borewell of 165mm dia clear using superfast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with aminimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) P. 46 / I. 9.1 PRED SR 2012-13 - 0 to 50m	Rmts	67.00					
33	Sinking borewell of 165mm dia clear using superfast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete	Rmts	67.00					
34	Sinking borewell of 165mm dia clear using superfast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete	Rmts	67.00					
35	Sinking borewell of 165mm dia clear using superfast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and	Rmts	67.00					
36	Sinking borewell of 165mm dia clear using superfast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and	Rmts	67.00					
37	Supply of ISI mark 175 mm nominal bore, Plain end steel casing pipe-grade of Steel Fee 410 of wall thickness 5.4 mm thick confirming to IS 4270:2001 and latest amendments, electric resistance welded steel tube material and confirming to IS 1387/1993 and manufactured by baseic open hearth electric or basic oxygen process in random length of 5 to 7mts both ends	Rmts	67.00					
38	Providing 250mm dia PVC Pipe 6kg/cm SE PRED Approved Rate	Rmts	95.00					
39	Providing and fixing160mm Borewell Cap P. iii, I No. 85	Rmts	67.00					
40	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar/ Atalanta/ Calamal/ make suitable for vertical installation in 150 mm dia borewell comprising of single stage or multi stage CF pump close coupled by	No	67.00					
41	Supplying of ISI marked galvanized mild steel tube (continously welded electric resistance welded (ERW) high frequency, induction welded (HFIW) Hot finished welded type of nominal bore given below screwed at both ends	Rmts	64.00					
42	Heavy Duty Collar 50 mm dia	Rmts	67.00					
43	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resitance conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto1100Volts as per IS-694:1990 & confirming to GTP	Mtr	67.00					
44	Erection of pumpset including aligning and balancing with all necessary erection materials and labour including supply and erection of one pair supprting clamps, one borewell cap. Cable clips with bolts, nuts, valves guages etc., involoved in the job (Necessary GI pipe and specials with be supplied by the board at the site free of cost) (As per rate approved KUWS	Rmts	67.00					
45	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15 mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc., P No. 44 / I No. 6.6.6 KPWD Electrical SR 2014-15	each	67.00					
46	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steelstrip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No.of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP- AP No. 55 / I No.7.4.44 core 16 Sq mm KPWD Electrical SR 2014-15	Mtr	67.00					
47	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / onwall / on pole as required. In existing trench / duct.P No. 61 / I No.7.8.16 Sq mm to16 Sq mm) KPWD Electrical SR 2014-15	Mtr	67.00					
48	Digging of trench of 0.6m deep x 0.50m wide refilling the trench to the required ground level and consolidating etc,.. Complete. (as per civil SR KSRB. I-2, P-7) P.NO.61/ with all leads and lifts , loading and unloading and all other incidental charges etc,.. comple as per specification and direction of engineer incharge,..	Mtr	0.00					

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49	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25 mm on pole / wall / drain crossing with necessary clamping arrangements for UG cable of 1.1 KVP.No.62 / I No. 7.12.1 KPWD Electrical SR 2014-15	Mtr	67.00					
50	Providing and supplying L.T cast iron post head suitable for 1.1 KV class UG cable filled with necessary bitumin/insulaying compound complete with terminals, clamps ,bolts and nuts and washers with terminals	No	67.00					
51	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cut outs and other equipment's on the meter board using 40 mm dia 2.90 mm thick GI pipe 2.5mtr long buried in a pit...The pit should be filled with equal proportion of salt and charcoal 150 mm all-round the pipe to	No	67.00					
52	Supplying & fixing of Porcelain fuse channel with cutout on existing wooden / panel using necessary nuts, bolt sand washers. P No. 44 / I No. 6.7.2 KPWD Electrical SR 2014-15	No	67.00					
53	KSRB 13-7.1-4: Providing and fixing in position 50 mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 Page No. 93 Item No.13.55 / PWD SR 2016-17	No	67.00					
54	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to works pot etc., complete. P.No. 95 / I. No. 13.81.3 PWD SR 2016-17	No	67.00					
55	Supplying and fixing 50 mm dia GI X nipple with ISI mark with all lead and lift load in gun loading and labour charges etc complete	No	67.00					
56	Supplying shunt capaitors conforming to IS 2834, 3 phase 400/440volts grade for power factor improvement of rotating machinery, Capacitor in KVAR rating Nos.2 KVAR capacity with all lead and lift =, loading, unloading and labour charges etc complete as per specifications	No	67.00					
57	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve,indicator ON/OFF, energycross-3 with Short circuit breaking capacity of 10 K and complete wiring as required confirming to IEC	No	67.00					
58	Fabricating supplying and mounting MS box made out...SWG suitable for floor/wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of redoxide primer paint and finally finishd with approved colour enameled metal paint etc., complete P.No. 49, I.No.6.40.2 KPWD Electrical SR 2014-15	Sq.cm	67.00					
59	Supplying and delivery at site brand newstar / Essen / Lotus / Sun-shines / Adarsh / GK Controls best indigenous make combined energy meter-cum-control panel board unit of size 600x450x200 mmminimum mechanically strong vermin and waterproof. The unit shall have two detachable doors suitable for operation on 3ph, 50Hz, 380/440volts, A.C supply with spring loaded latch, locking device with akey ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided. the combined energy meter cum-control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. 12.5 HP to 15 HP Star Delta Starter SERDED Rate	No	67.00					
60	Earthwork excavation for pipeline trenches including deporiting or bank upto a lead of 50 mtrs including shiriry and statting danger lighting and using site rails and boming poles at every 100 mtrs wherever necessary as directed in the following structure manhole. Page No.01 / Item No.1.2.2 / PRED SR 2012-13 Hard Soil	Cum	67.00					
61	Providing and instalation at site of works P.V.C. Pipes including cost of pipes and specials and incluidng lowring into trenches, laying true to line, level and perfect linking at joints, leak proof including jointing encasing the pipe alround to a depth Not less than 15cm with grave or selected earth avalabile from the execavation Etc., Page No.15 item No.3.4.2 b PRED SR	Rmts	67.00					
62	Refilling the basement and pipeline treanches with secleted available earth for trench excavation including authority condition in layers from thdi including disponsary of the surplus earth with a heavy 200mtrs PageNo.3 / Item No.1.6 / PRED SR 2012-13	Cum	67.00					
63	KSRB 13.6.3-6: Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 50mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS13.2.6/13.3P. 92 / I.13.37 PWD SR - 2016-17	each	67.00					

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BOQ Item No	Description	Unit	% Completed	20%	40%	60%	80%	100%
64	KSRB 2-2.2: Earthwork excavation for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5 m and above in width, in Hard soil not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m. after	Cum	34.00					
65	KSRB.2.14-1 : Extra for additional lift of 1.5mtr or part there of for excavation in lose / soft or hard soil including cost of material, labour with all leads and lifts , loading and unloading and all other incidental charges etc,.. comple as per specification and direction of engineer incharge,..	Cum	0.00					
66	KSRB 4-1.3: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220 kgs with 40 mm and down size graded granite metal coarse aggregates @ 0.892cum and fine aggregares @0.465 cum machine mixed, concrete laid in layers not, exceeding 15 cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.	Cum	0.00					
67	KSRB 4-1.3: Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180 kgs with 40 mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @0.57 cum machine mixed, concrete laid in layers not, exceeding 15 cms, thick, well	Cum	66.00					
68	KSRB 5.2.3: Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20cms high, bond stones at two m.apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 Page No.23 / Item No.5.6 / PWD SR 2016-17	Cum	67.00					
69	KSRB 5.3-3: Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5-1.13 Page No.23 / Item No. 5.9 / PWD SR 2015-16	Cum	42.00					
70	KSRB 2.3: Filling available excavated earth (excludingrock) insides of foundations upto plinth in layers not exceeding 20cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5m. including cost of all labour complete as per	Cum	34.00					
71	KSRB 5-11: Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200 mm having block density not less than 1800kg/m3 and having aminimum average compressive strength 5.00N/mm2 confirming to IS 2185 (Part): 2005 and constructed with CM	Sqm	31.00					
72	KSRB 4.2.2: Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal, coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastisiser @ 3lts confirming to IS 9103-1999	Cum	38.00					
74	KSRB 4.2.10: Providing and laying in position reinforced cement concrete of mix M20 with OPC cement @ 24kgs, with 12mm and down size graded granite metal coarse aggregates @ 0.5175 cum and fine aggregates @ 0.345 cum with superplasticiser @ 0.225lts machine mixed well compacted for	Cum	30.00					
75	KSRB 4.9.1: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to	MT	21.00					
76	KSRB 4-6.1 Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifica tons. Specification No. KBS 4.6.2 with all lead and lift ,- loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer incharge	Sqm	0.00					
77	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached plasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 Page No.15 / Item No. 4.31 / PWD SR 2016-17	Sqm	54.00					
78	KSRB 4-6.5: Providing and removing centering, shuttering, strutting propping etc., for columns, pillars, post and struts, square / rectangular/ polygon in plan including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 with all lead and lift, loading and unloading and allother incidental charges etc., complete as per	Sqm	0.00					
79	KSRB 4-6.5 Providing and removing centering, shuttering, strutting, propping etc., for columns, pillars, post and struts, square / rectangular/ polygon in plan including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per	Sqm	0.00					
80	KSRB 4-6.7 Providing and removing centering, shuttering, strutting. propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1m in depth inciuding cost of all materials, labour complete as Sqm per specifications. Specification No. KBS 4.6.2 with all lead and lift	Sqm	0.00					

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BOQ Item No	Description	Unit	% Completed	20%	40%	60%	80%	100%
81	KSRB 4-6.10: Providing and removing centering, shuttering, strutting, propping etc., for chajjas, corbels etc., including edges including cost of all materials, labour complete as per specifications.Specification NO KBS 4.6.2 Page No.16 / Item No. 4.37 / PWD SR 2016-17	Sqm	7.70					
82	KSRB 15.3.13: Providing 12mm thick cement plastering single coat with cement mortar 1:3, to ceiling including rounding off corners where ever required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.Page No.114	Sqm	27.00					
83	KSRB15.3.11: Providing 20mm thick cement plastering single coat with cement mortar 1:4, to stone masonry including rounding off corners where ever required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.	Sqm	70.00					
84	KSRB15-3.10 : Providing 20mm thick cement plaster in single coat with cement mortar 1:6, to stone masonry & concrete surface including rounding off corners wherever required smooth rendering, Providing and removing scaffolding, including cost of materials, labour, curing complete	Sqm	0.00					
85	KSRB 15.3.2 Providing 12mm thick cement plaster in single coat with cement mortar 1:4, to brick masonry including rounding off corners wherever required smooth rendering, Providing and removing scaffolding, including cost of materials, labour: curing complete as per	Sqm	0.00					
86	KSRB 15.10.2 Providing white washing for every one additional coat with lime of approved quality, to give an even shade including cost of materials labour, complete as per specifications. with all lead and lift, loading and unloading and allother incidental charges etc., complete as per specification	Sqm	0.00					
87	KSRB 15.10.4 Providing white washing to ceiling and I or sloping roof surface with additional one coat with lime of approved quality, to give an even shade including cost of materials, labour, complete as per specifications with all lead and lift, loading and unloading and allother	Sqm	0.00					
88	KSRB15-7: Providing lime rendering for plastering to wall and ceiling, including cost of materials, labour, curing complete as per specifications. (P.115/I.15.33 PWD SR-2016-17).	Sqm	68.00					
89	KSRB15.3.9: Providing 18mm thick cement plastering single coat with cement mortar 1:6, to brick masonry including rounding off corners where ever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications	Sqm	68.00					
90	KSRB15-14.1: Providing and applying two coats with oilbound washable distemper of approved brand and shade on wall surface including priming coat with distemper pimer after thoroughly brooming the surface free from mortar drops and other foregin matter including preparing the surface even	Sqm	38.00					
91	KSRB15-16.1: Providing and finishing external walls in two coats with water proof cement paint of approve brand and shade to give an even shade after thourghly brooming the surface to remove all dirt and losse powdered material, free from mortar dops and other foreign matter cost of materials, labours, complete as per specifications PWD SR 2016-17 (P. 118 / I. 15.53.2) with Primer	Sqm	34.00					
92	Providing and applying two coats with Plastic emulsion paint of approved brushing the surface,free from mortar drops and other foreign matter primer.For internal walls. with all lead and lift, loading and unlos ing and brand wall surface to a give an even approved shade after throuughly including priming, including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications with	Sqm	0.00					
93	Providing and applying two coats with Plastic emulsion paint of approved brand wall surface to a give an even approved shade after throuughty brushing the surface,free from mortar drops and other foreign matter including priming, including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications,with primer.For internal walls Ceiling. with all lead and lift loading and	Sqm	0.00					
94	Providing vitrified tiles 60 × 60cms of approved make shade and size for flooring laid on a bed of 12mm thick cement mortar 1.3 mix, flush pointing with white cement using colour pigment, including cost of materials, labour,curing complete as per specification. with all lead and lift loading and unloading and allother incidental charges etc, complete as perspecification and direction of the engineer-in-charge of the work	Sqm	0.00					
95	KSRB 14-17.2 Providing skirting, dado, rises of steps with colour glazed tiles on 10mm thick cement plaster 13 and jointed with white cement slurry over rough plaster surface (excluding cost of rough plastered surface which should be measured and paid separately) using glazed tilesof approved make and size including cost of matenals, labour, complete as per specifications. Specification No KBS 14 16, 14.17 Colour glazed tiles30x60	Sqm	0.00					

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BOQ Item No	Description	Unit	% Completed	20%	40%	60%	80%	100%
96	KSRB 9.4-2 Providing Honne wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, HOM of machineries complete as per specifications. Specification No. KBS 9.33 with all lead and lift, loading and unloading and allother incidental charges etc. complete as	Sqm	0.00					
97	KSRB 9.5-2 Providing and fixing in position fully panelled Honne wood shutters for doors, styles and rails of 40mm. thick with bottom and lock rails 80mm wide top rail and styles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, HOM of s machineries complete as per specifications. (excluding cost of fixtures) Specification No. KBS 9.34 with all lead and lift, loading and unloading	Sqm	0.00					
98	KSRB 7.9 Providing and fixing S.gil work for windows and ventilators using M.S.flats, or M.S. square rods, or combination of M.S.flats and square rods as per approved design, drawing including cutting steel sections and welding the same to required pattern with a coat of red lead primer, cost of materials, fixtures, labour and HOM of machinery complete as per specifications. Specification No. KBS 7.12 with all lead ane lift	Sqm	0.00					
99	KSRB 7.10 Providing and fixing in position aluminium windows and ventilators as per approved drawings with sliding shutters using double track window frame section of size-61,85x31.75mm, with 1.2mm thick bottom section weight 0.695 kg/m, sides and top sections 1.3 mm. thick weight 0.659 kg/m; andl shutter comprising top and bottom section of size 40mmx18mm. 1.25mm thick 0.417 kg/m; shutter outer side 40mmx18mmm 1 25mm.thick weight 0.417 kg/m, shutter interlock section 40mmx26.7mm,	Sqm	0.00					
100	KSRB 15-17.4 Applying priming coat over new wood surface and / or wood based surface, after brushing with ready mix enamel priming paint including preparing the surface after thoroughly cleaning oil, grease, dirt and foreign matter, sand papering and knotting ready mix paint includingcost of materials, labour, complete as per specifications with all lead and lift loading and un'oading and allother incidental charges etc.,	Sqm	0.00					
101	Providing and applying painting two coats (excluding priming coat) on new wood surface and / or wood based surface with enamel paint to give an even shade, cleaning the surface of all dirt, dust and foreign matter, 6.3 sand papering including cost of materials, labour, complete as per cifications. with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the	Sqm	0.00					
102	KSRB15-18.2: Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications. Page No. 121 / Item No. 15.74 / PWD SR 2016-17	Sqm	30.00					
103	Providing and fixing Special make glazed Vitrified tiles (Granomite finis) of approved make, quality and colour of sized 6000x600x10 mm thick fixed on existing flooring with a special roffe adhesive for flooring and skirting etc., complete including providing spears at required interval and removing stains etc., complete.Page No.107 / Item No.14.43 / PWD SR 2016-17	Sqm	66.00					
104	Providing and laying / fixing cement base, precast pre polished cement concrete, designer tiles 25mm thick conforming to IS 1237 heavy duty tiles for flooring reads of steps of steps and landin, laid on a bed of 12mm thick cement mortar 1:3 misfinished with flush pointing using white cement, including cost of materials including cutting, griding the edge ti half/full round where ever requires labour, curing complete as per specification Page	Sqm	2.50					
105	KSRB7.7: Providing and fixing in position in cement concrete 1:3:6 steel glazed windows and ventilators side hung / to phung fully open able as per approved drawings using Zangles of 25x33x3mm, weighing 1.419Kg/m both for outer and inner frames and central mullion section of size 25x46x3mm	Sqm	67.00					
106	KSRB :7.5 Providing and fixing pull and push type rolling shutters of approved make out of 18 guage, 75mm wide cold rolled steel lths of convex corrugation, with side guides and bottom rail, with inter locking arrangements for steel laths by means of alternate clips, suspension shaft with High tension coil type springs two numbers, mounted on specially	Sqm	49.00					
107	Providing revsrse osmosis system to cover2000 Liters of High TDS water per hour	Nos	33.4					
108	Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multi strand FRLS PVC insulated, 2X1.5Sq.mm Cable confirming to the GTP, with a 6 Amps flushtype SP control switch shall be fixed on the existing plastic sheet / gang box, the other end of the wires shall be terminated with sufficient loose length in a wood / PVC round block. complete for each	Point	33.4					

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BOQ Item No	Description	Unit	% Completed	20%	40%	60%	80%	100%
109	Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multi strand FRLS PVC insulated, 2X1.5Sq.mm Cable confirming to the GTP, with a 6 Amps flushtype SP control switch shall be fixed on the existing plastic sheet / gang box, the other end of the wires shall be terminated with sufficient loose length in a wood / PVC round block. complete for each outlet. GROUP A (Page No.05, Item No.2.1 KPWD SR 2014-15 c) Long point above 6 Mtr upto 10 Mtr from tapping point to out let via switch	Point	33.4					
110	Supplying and flush mounting teak wooden box without front plank, made of not less than12mm thick wood, after due groove cutting, Finishing with necessary cement plastering complete (Page No.03, Item No. 1.6) KPWD SR 2014-15 (1.6.5) 4"x4"x3" (101x101x76mm)	Each	33.4					
111	Supplying and flush mounting teak wooden box without front plank, made of not less than12mm thick wood, after due groove cutting, Finishing with necessary cement plastering complete (Page No.03, Item No. 1.6) KPWD SR 2014-15 (1.6.1) 12"x12"x3" (300x300x76mm)	Each	33.4					
112	Supplying and flush mounting teak wooden box without front plank, made of not less than12mm thick wood, after due groove cutting, Finishing with necessary cement plastering complete (Page No.03, Item No. 1.6) KPWD SR 2014-15 (1.6.3)10"x7"x3" (254x178x76mm)	Each	33.4					
113	Supplying 4mm thick plastic sheet with necessary nitches for fixing switches, regulators etc., and fixing on existing wooden or metal box using N.F.screws. (Page No.17,Item No.3.9) KPWD SR 2014-15	Sqcm	33.4					
114	Extra for Groove cutting in brick wall/Ccfloor to the suitable depth for concealing of Conduit/GI pipe and plastering, finishing upto wall surface complete. Upto 50mm conduit in brickwall (Page No. 03, Item No.1.7.1) KPWD SR 2014-15	mtr	33.4					
115	Supplying heavy gauge PVC Conduit Pipe19/20mm dia 2mm thick with suitable size bends, metal junction boxes adhesive paste etc., by groove cutting in the wall and fixing by bracing U or J hooks and cement plastering upto the wall surface and run with 18 SWG GI fish wire run throughout the conduit where ever necessary. (Page No. 02, Item No. 1.3.1) KPWD SR 2014-15	Mtr	33.4					
116	Supplying and fixing PBBC/Bakelite straight or slant batten holder and wiring with 60w/230voltslamps. (Page No.20,Item No.4.2) KPWD SR 2014-15	Each	33.4					
117	Supplying patti type fluorescent tube light fitting of 2'-suitable for 14watts fluorescent tube fitting, made out of M.S. Sheet and stove enameled with HF Electronic Ballast, locking type brass contact holders mounted on double fold type sheet base fully wired for use on 230volts AC. Supply including T5	Each	33.4					
118	Wiring for lighting / power circuit using one of FRLS PVC insulated1100 Vgrade, multi strand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP-A1.5sqmm (Page No.06,Item No.2.5.2) KPWD SR 2014-15	Mtr	33.4					
119	Supplying and fixing cast Aluminum round or oblong type bulk head fitting with GI wire guard, glass cover with 60/100 watts 230V GLS lamp. with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Each	33.4					
120	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and othe requipment's on the meterboard using 40mm dia 2.90mm thick GI pipe 2.5mtr long buried in a pit... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3.of IS732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through	No	33.4					

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